

Work Order ID 52208

September 17, 2009 2:44:10 PM



Page 1

Item ID: D350-591-133

Accept



Setup Start



Revision ID: B

Stop



Item Name: Aft Maintenance Step

Start Date: 9/21/09 Start Qty: 1.00



Cust Item ID:

Required Date: 9/25/09 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: *W*

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D2946

Rev B

100

0.00



DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile and type labels as per PPP D350-591-133 CHG003

5/01/09/22

DS19459 ECN 09-061 NEW LABELS ONLY

HJ for BG 09/09/21

250

Pick Kit

0.00



Packaging

Memo

0.00

Packaging

PULL FROM STOCK:

1 X D350-591-133 B47946

CHG002

ADD TO EACH KIT D350-591-133:

8 X AN4-16A B

112641

8 X D2732-030 B

43118

PER ECN 09-621

Pcgs/21 ①

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Page 2

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Customer:

Reference:

Run Start



Approvals: Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

260

QC4- 100% Inspect kits for completeness

0.00



QC

Memo

0.00

Quality Control

270

Packaging

0.00



Packaging

Memo

0.00

Packaging

RE-PACKAGE PER PPP
USING NEW B/N
NEW LABELS @ CHG 003 REQ'D
+ DSI 9459 PAPERWORK ADDED

280

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

DART Dart Aerospace Ltd. 1270 ABERDEEN ST HAWKESBURY, ON CANADA K6A 1K7			
P.N		D350-591-133	
DESC.		Aft Maintenance Step	
LOT		B47946	
MODEL		AS350/355	
CHG	CHG002	STC	SH92-6
STC	SH967NE	STC	

MADE IN CANADA D2729-1

TC APPROVAL # 09-89

TEL: 1-613-632-5200

09/09/23

MF 09-09-23

Picklist Print

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Work Order ID: 52208

Parent Item: D350-591-133RevB

Parent Item Name: Aft Maintenance Step

Comments:

Start Date: 9/21/09

Required Date: 9/25/09

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
AN4-16A 80 Bolt		Purchased	No			250	Each	154.0000	8.0000	✓		

Warehouse
Location

Loc Qty

Loc Code

Main Warehouse

ST

154

108471

86

112641

50

19278

18

D2732-030RevB1 80

Manufactured No

250

Each

0.0000

8.0000

Rubber Cushion

(8X) 3.00" per DSI 9459 revB

- measure 8 1/2

112641

43118

PC 9/15/21 (1)

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS D350-591 REV. G OR EARLIER
AND
INSTRUCTIONS OF CONTINUED AIRWORTHINESS ICA-D350-591 REV. 2 OR EARLIER
REF CANADIAN STC: SH92-6
REF FAA STC: SH967NE

For D350-591-121/-122/-123/-124/-133 steps, customers have the option of installing D2732-030 cushions under the D2230-1/-3 clamps to accommodate varying crosstube diameters and to improve fit. It is also acceptable to use longer or shorter AN4 bolts, and/or extra AN960JD416 washers under the nut to ensure 1.5 to 4 threads in safety. See Figure 1 on sheet 2 of this service instruction for reference.

For D350-591-121/-122 steps at CHG 005, D350-591-123/-124 steps at CHG 004, and D350-591-133 steps at CHG 003, the parts list of D350-591 Rev. G and ICA-D350-591 Rev. 2 is amended as follows:

ADD:

Qty -121	Qty -122	Qty -123	Qty -124	Qty -133	Part Number	Description
X					D350-591-121	Heli-Access-Step™, Short Step – High Skid, LH
	X				D350-591-122	Heli-Access-Step™, Short Step – High Skid, RH
		X			D350-591-123	Heli-Access-Step™, Short Step – Low Skid, LH
			X		D350-591-124	Heli-Access-Step™, Short Step – Low Skid, RH
				X	D350-591-133	Heli-Access-Step™, Aft Maintenance Step
2	2	2	2	8	D2732-030	CUSHION
2	2	2	2	8	AN4-16A	BOLT

The DSI-9459-011 kit is available for customers with earlier model D350-591-121/-122/-123/-124 steps. Longer AN4 bolts are provided to fasten the clamps. The DSI-9459-013 kit is available for customers with earlier model D350-591-133 steps.






Qty -011	Qty -013	Part Number	Description
X		DSI-9459-011	Rubber Cushion Kit (for -121/-122/-123/-124 steps)
	X	DSI-9459-013	Rubber Cushion Kit (for -133 steps)
2	8	D2732-030	CUSHION
2	8	AN4-16A	BOLT

52208

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED
BY: 
D. SHEPHERD (DE # 02)

DATE: 09.06.24
CERT. NO.: SH92-6
ISSUE NO.: 11

B	AN4-16A WAS -17A FOR -013/-133 KIT	CP	09.06.24
A	NEW ISSUE	CP	09.04.17
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN		REV. B	
CHECKED		SHEET 1 OF 2	
MFG. APPR.	N/A	SCALE	
APPROVED		OPTIONAL CLAMP MODIFICATIONS	
DE APPR.		NTS	
DATE	09.06.24	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

List Lots

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Criteria : Item ID: D350-591-133RevB All Locations All Warehouses All Quantity

Item ID Item Name	Warehouse ID Location ID	Lot Number	Last Trans Date	Lot Qty	Shelf Life Dt	Lot Code	Type Code	Comments
D350-591-133RevB Aft Maintenance Step	Main Warehouse FG	47946	9/03/09	1.0000		QC21	CHG002	
	Main Warehouse FG	51310	9/03/09	4.0000	OK	QC21	CHK 083	
			Total:	5.0000				

Work Order Summary

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Criteria : Work Order ID: 51310 Item ID: D350-591-133RevB Product Family LARGE FAB
 Work Order Start Dates 8/17/09 to 8/17/09 11:59:59 PM Work Order Required Dates 8/24/09 to 8/24/09
 11:59:59 PM

All References
 Work Order Status Costed

Work Order ID	51310	Required Qty	4.0000	Status Code	Costed
Item ID	D350-591-133RevB	Accepted Qty	4.0000	Scrap Qty	0.0000
Item Name	Aft Maintenance Step				
Current Acct Value	\$400.139	Sales Order ID			
Start Date	8/17/09	Required Date	8/24/09	Completed Date	9/03/09 9:02:39 AM

Standard	** Actual **		** Acct. Value **	** Variance **	** Variance % **
<u>Direct Costs</u>	<u>Total</u>	<u>Each</u>	<u>Each</u>	<u>Each</u>	<u>Each</u>
Material	\$525.760	\$131.440	\$129.053	-\$2.387	-1.85%
Labor	\$366.887	\$91.722	\$53.701	-\$38.021	-70.80%
Outplant	\$0.000	\$0.000	\$0.000	\$0.000	0.00%
Variable Burden	-\$17.006	-\$4.252	\$69.435	\$73.687	106.12%
Fixed Burden	\$765.227	\$191.307	\$107.636	-\$83.670	-77.73%
Material Burden	\$0.000	\$0.000	\$0.000	\$0.000	0.00%
** Total **	\$1,640.867	\$410.217	\$359.826	-\$50.391	

Item ID/ Item Name	Required Qty	Issue Code	Issue Date	Issued Qty	Cost Amount
AN4-11A	16.0000				
<u>Bolt</u>			8/27/09	16.0000	\$4.480
AN4-14A	32.0000				
<u>Bolt</u>			8/27/09	32.0000	\$11.200
AN4-16A	32.0000				
<u>Bolt</u>			8/27/09	32.0000	\$12.480
AN4-7A	8.0000				
<u>Bolt</u>			8/27/09	8.0000	\$2.104
AN960JD416	56.0000				
<u>Washer</u>			8/27/09	56.0000	\$1.898
D2230-1RevF	13.0000				
<u>Lug</u>			9/03/09	13.0000	\$312.871
D2230-1RevG	3.0000				
<u>Lug</u>			9/03/09	3.0000	\$116.876
D2230-3RevF	16.0000				
<u>Lug</u>			9/03/09	16.0000	\$312.338
D2622-120CRevC1	2.0800				
<u>Step Extrusion</u>			9/03/09	2.0800	\$48.475
D2732RevB1	8.0000				
<u>Rubber Extrusion</u>			9/03/09	8.0000	\$32.640
D2734RevC	8.0000				
<u>Step End Plate</u>			8/19/09	4.0000	\$14.019
			8/25/09	4.0000	\$14.019
D2856-400RevA	5.0400				
<u>Abraison Strip</u>			9/02/09	5.0400	\$21.253
D2944RevA	8.0000				
<u>Step Mounting Plate</u>			8/19/09	7.0000	\$50.350
D2945RevA	4.0000				
<u>Step Mounting Plate</u>			8/27/09	3.0000	\$20.736
			9/02/09	1.0000	\$13.610
MS21042L4	56.0000				

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Work Order Summary

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Nut 8/27/09 56.0000 \$13.367
Total Matl Amts: \$1,002.714

Work Center

Employee ID	Rout Seq ID	Labor Date	Setup Hours	Actual Setup Hours	Labor Hours	Actual Labor Hours	Nbr of WOs	Setup Amount	Labor Amount	Fix Burd Amount	Var Burd Amount	Total Amounts
LAUG01												
	8/26/09											
220			0.00	0.00	2.00	2.00	1.00	\$0.000	\$31.100	\$83.740	\$0.000	\$114.84
Total:			0.00	0.00	2.00	2.00	1.00	\$0.000	\$31.100	\$83.740	\$0.000	\$114.84

Work Center HandFinish

Employee ID	Rout Seq ID	Labor Date	Setup Hours	Actual Setup Hours	Labor Hours	Actual Labor Hours	Nbr of WOs	Setup Amount	Labor Amount	Fix Burd Amount	Var Burd Amount	Total Amounts
drou02												
	8/24/09											
160			0.00	0.00	0.48	0.48	1.00	\$0.000	\$7.435	\$11.690	\$0.000	\$19.12
ROQU01												
	8/26/09											
210			0.00	0.00	0.12	0.12	1.00	\$0.000	\$1.888	\$2.968	\$0.000	\$4.85
	8/27/09											
230			0.00	0.00	2.81	2.81	1.00	\$0.000	\$43.717	\$68.739	\$0.000	\$112.45
Total:			0.00	0.00	3.41	3.41	3.00	\$0.000	\$53.040	\$83.396	\$0.000	\$136.43

Work Center Large Fab

Employee ID	Rout Seq ID	Labor Date	Setup Hours	Actual Setup Hours	Labor Hours	Actual Labor Hours	Nbr of WOs	Setup Amount	Labor Amount	Fix Burd Amount	Var Burd Amount	Total Amounts
DROU02												
	8/18/09											
110			0.00	0.00	1.50	1.50	1.00	\$0.000	\$27.480	\$54.765	\$0.000	\$82.24
	8/19/09											
110			0.00	0.00	0.48	0.48	1.00	\$0.000	\$8.702	\$17.342	\$0.000	\$26.04
EWER01												
	8/19/09											
130			0.00	0.00	2.69	2.69	1.00	\$0.000	\$49.341	\$98.332	\$0.000	\$147.67
130			0.00	0.00	0.67	0.67	1.00	\$0.000	\$12.254	\$24.422	\$0.000	\$36.67
	8/25/09											
180			0.00	0.00	1.60	1.60	1.00	\$0.000	\$29.292	\$58.376	\$0.000	\$87.66
180			0.00	0.00	0.09	0.09	1.00	\$0.000	\$1.684	\$3.355	\$0.000	\$5.03
Total:			0.00	0.00	7.03	7.03	6.00	\$0.000	\$128.753	\$256.592	\$0.000	\$385.34

Work Center Powdercoat

Employee ID	Rout Seq ID	Labor Date	Setup Hours	Actual Setup Hours	Labor Hours	Actual Labor Hours	Nbr of WOs	Setup Amount	Labor Amount	Fix Burd Amount	Var Burd Amount	Total Amounts
LAUG01												
	8/26/09											
220			0.00	0.00	0.04	0.04	1.00	\$0.000	\$0.596	\$0.936	\$0.000	\$1.53
Total:			0.00	0.00	0.04	0.04	1.00	\$0.000	\$0.596	\$0.936	\$0.000	\$1.53